

FIG. 1

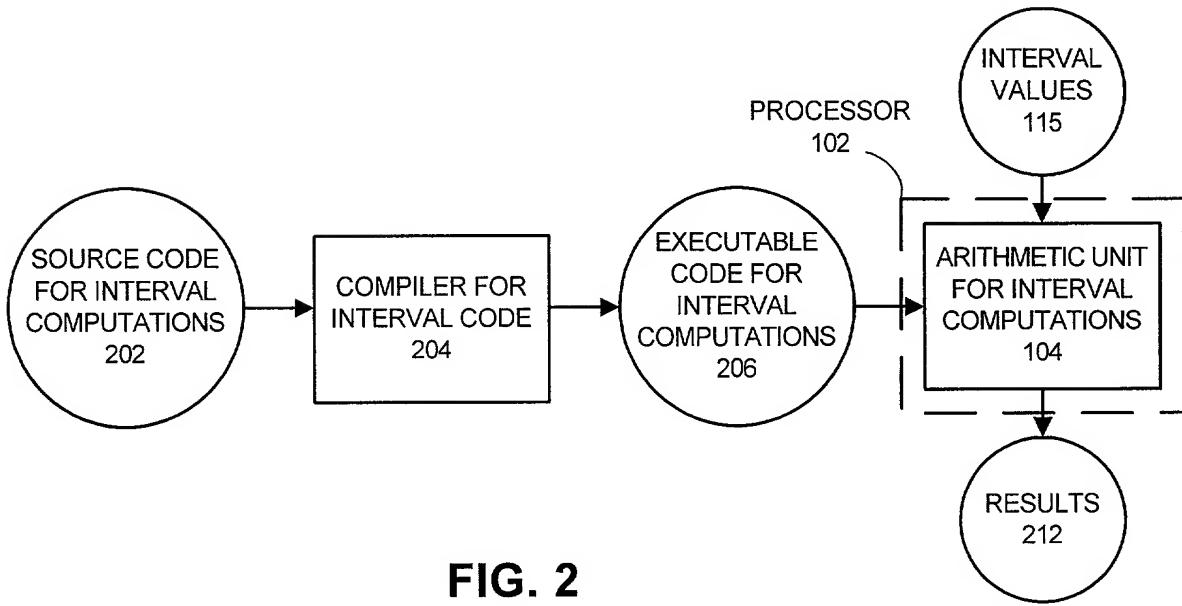


FIG. 2

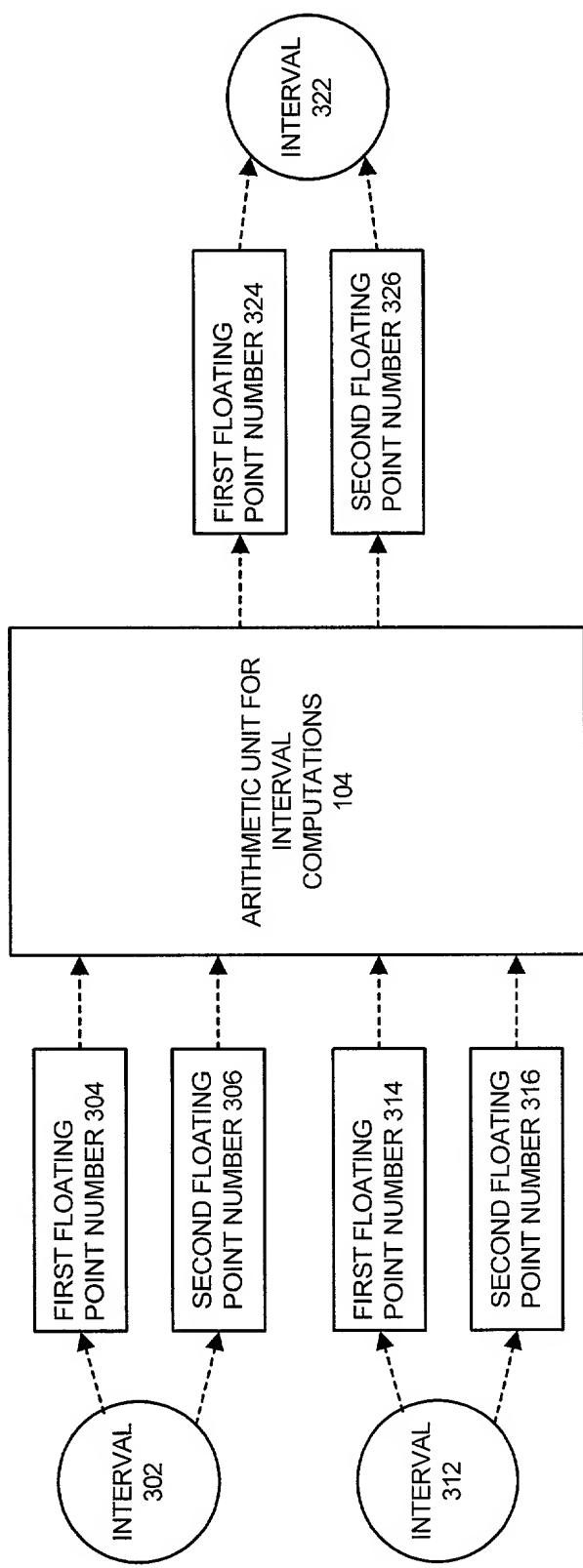
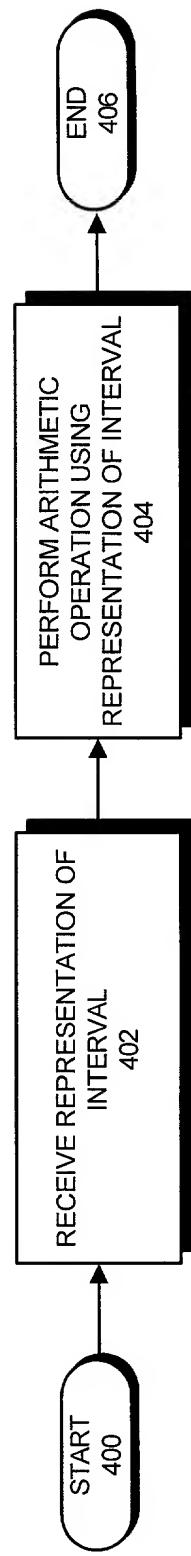


FIG. 3



$$X = [\underline{x}, \bar{x}] = \{x \in \mathfrak{R}^* \mid \underline{x} \leq x \leq \bar{x}\}$$

$$Y = [\underline{y}, \bar{y}] = \{y \in \mathfrak{R}^* \mid \underline{y} \leq y \leq \bar{y}\}$$

$$(1) \quad X + Y = [\downarrow \underline{x} + \underline{y}, \uparrow \bar{x} + \bar{y}]$$

$$(2) \quad X - Y = [\downarrow \underline{x} - \bar{y}, \uparrow \bar{x} - \underline{y}]$$

$$(3) \quad X \times Y = \left[\min\left(\downarrow \underline{x} \times \underline{y}, \underline{x} \times \bar{y}, \bar{x} \times \underline{y}, \bar{x} \times \bar{y}\right), \max\left(\uparrow \underline{x} \times \underline{y}, \underline{x} \times \bar{y}, \bar{x} \times \underline{y}, \bar{x} \times \bar{y}\right) \right]$$

$$(4) \quad X/Y = \left[\min\left(\downarrow \underline{x}/\underline{y}, \underline{x}/\bar{y}, \bar{x}/\underline{y}, \bar{x}/\bar{y}\right), \max\left(\uparrow \underline{x}/\underline{y}, \underline{x}/\bar{y}, \bar{x}/\underline{y}, \bar{x}/\bar{y}\right) \right], \text{ if } 0 \notin Y$$

$$X/Y \subseteq \mathfrak{R}^*, \text{ if } 0 \in Y$$

FIG. 5

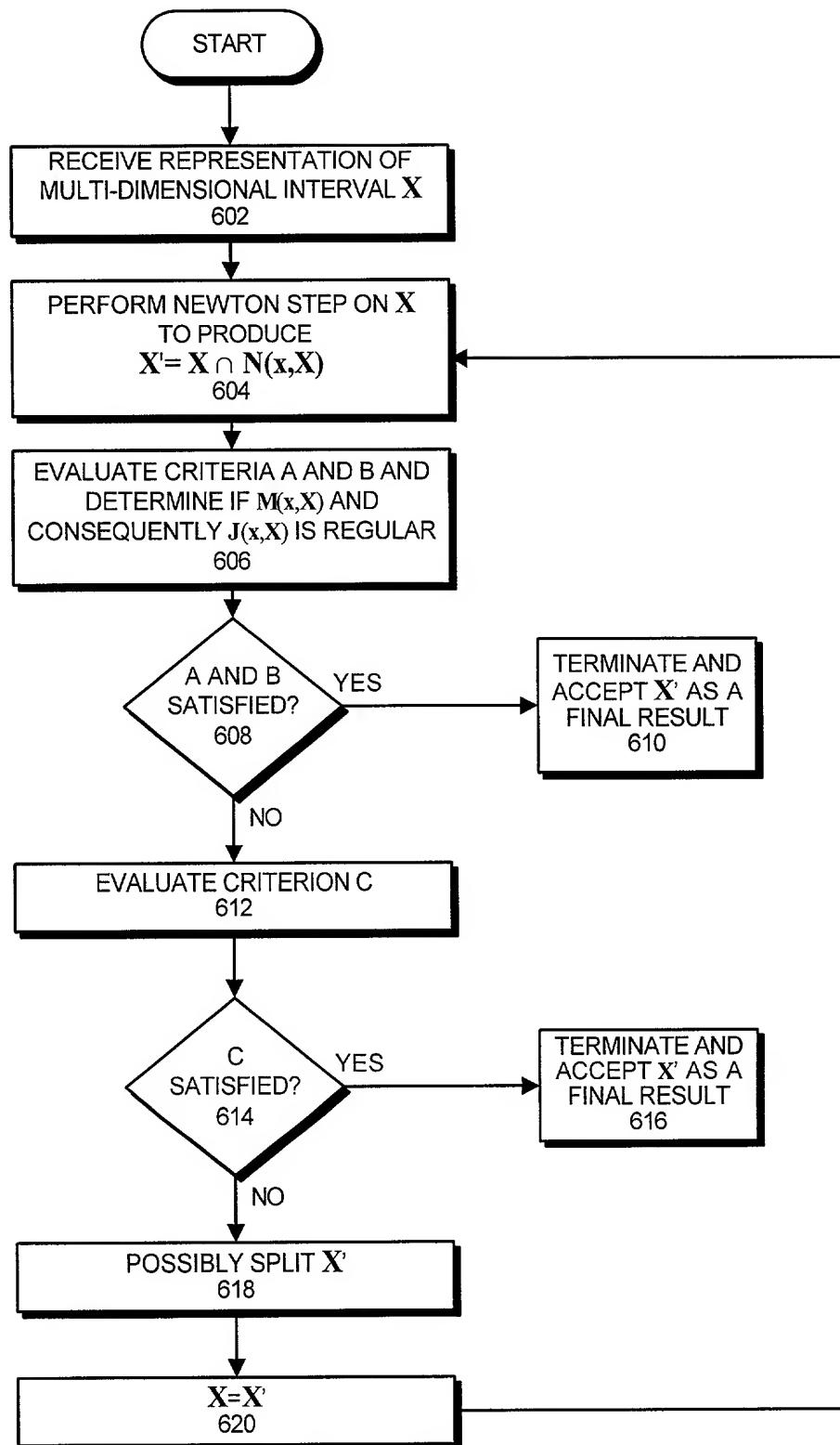


FIG. 6

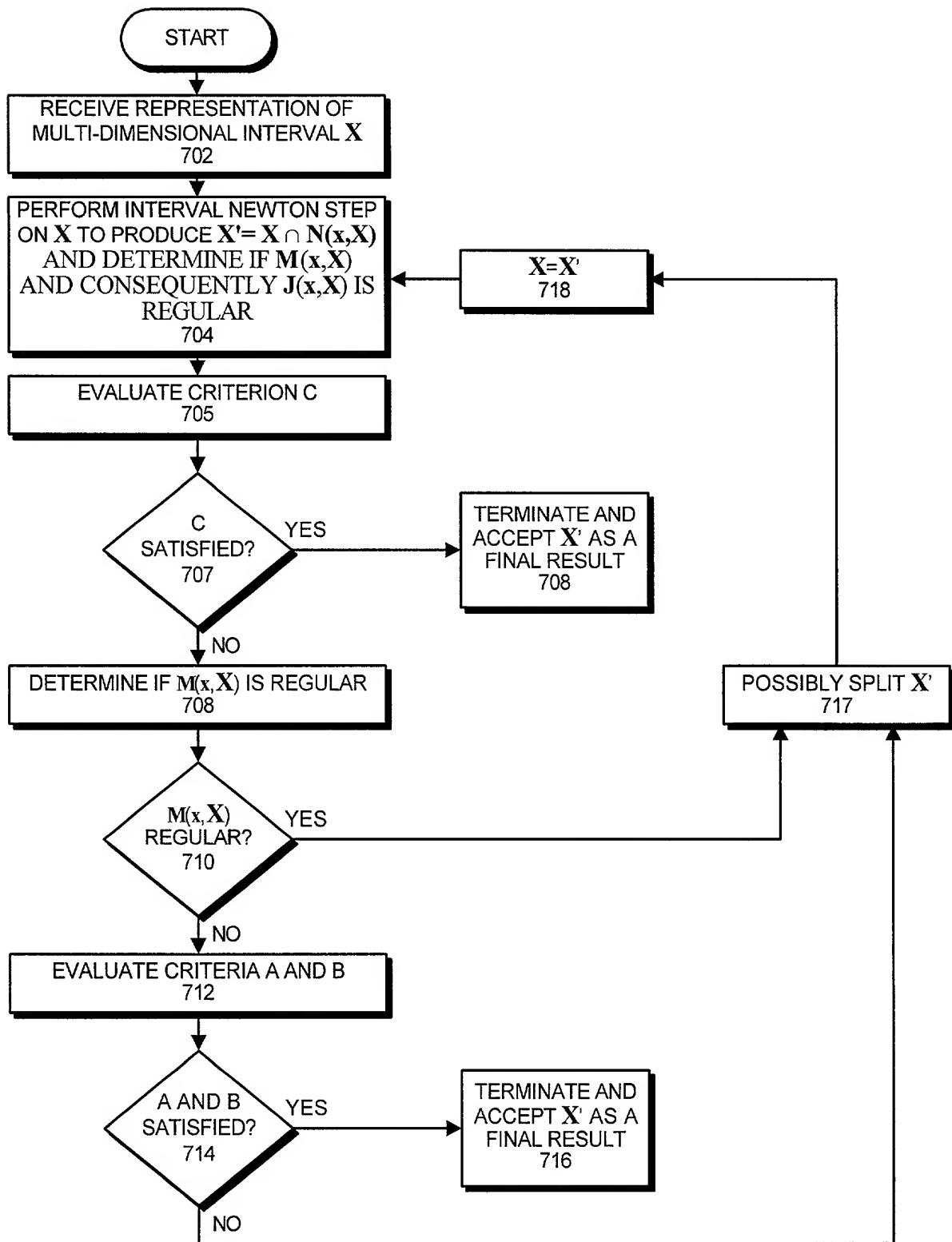


FIG. 7